# **EXHIBIT A**

#### EXPERT REPORT OF DR. MICHAEL P. MCDONALD

I am Dr. Michael P. McDonald, Associate Professor of Government and Politics at George Mason University and non-resident Senior Fellow at the Brookings Institution. I have written extensively on redistricting, and I have written on the American electoral system more broadly, and since the late 1980s have served as a redistricting consultant or expert witness in nine states and have been an expert witness in election-related litigation in three states. My attached curriculum vita provides further information about my experience and qualifications. I am being compensated \$250/hr for my work.

#### **Findings**

I have been asked by counsel for MARGARITA V. QUESADA, ROMEO MUNOZ, MARC VEASEY, JANE HAMILTON, LYMAN KING, JOHN JENKINS, KATHLEEN MARIA SHAW, DEBBIE ALLEN, JAMAAL R. SMITH, and SANDRA PUENTE as well as counsel for the TEXAS DEMOCRATIC PARTY and its Chairman BOYD RICHIE to evaluate four redistricting plans, which are analyzed in this report. The congressional plan adopted by the Texas government (C185), the Veasey Fair Texas Plan introduced in the Texas legislature (C121), the adopted state Senate plan (S148), and the adopted state House plan (H283).

It is my opinion that the congressional and state legislative plans adopted by the Texas government are Republican gerrymanders, designed with a purpose to dictate electoral outcomes by strategically grouping voters within districts based on their political orientation. The representational rights of Democratic voters and the Democratic Party are thereby disfavored on the basis of their political views.

#### **Analysis**

A commonly used method to determine the potential political consequences of a redistricting plan is to aggregate statewide election returns into proposed districts. The resulting statistics can be used to evaluate if a redistricting plan is a partisan gerrymander. The methodology clearly illustrates the burdens that partisan gerrymanders place upon voters and political parties. I explain the methodology details of my approach in a following section. Figures and Data Tables are provided in the Exhibit B Appendix.

In a typical statewide general election held from 2002 to 2010, Democratic candidates received, as a share of the two-major party candidates' vote, an average of 43.6% of the vote within the adopted congressional districts. The maximum two-party vote share received by a Democratic statewide candidate was 49.1% in the Supreme Court Position 7, 2008 election.

For the adopted congressional plan, in a typical election where Democratic statewide candidates receive 43.6% of the vote, they can expect to receive a majority of the vote in 27.8% of the districts. If Democratic statewide candidates receive 50% of the vote, they can expect to receive a majority in 33.3% of the districts.

For the adopted state Senate plan, in a typical election where Democratic statewide candidates receive 43.6% of the vote, they can expect to receive a majority of the vote in 35.5%

of the districts. If Democratic statewide candidates receive 50% of the vote, they can also expect to receive a majority in 35.5% of the districts.

For the adopted state House plan, in a typical election where Democratic statewide candidates receive 43.6% of the vote, they can expect to receive a majority of the vote in 33.3% of the districts. If Democratic statewide candidates receive 50% of the vote, they can expect to receive a majority in 36.7% of the districts.

In the case of the congressional plan, the Veasey Fair Texas Plan demonstrates that it is possible to create a redistricting plan that does not so severely burden the representational rights of Democratic voters and the Democratic Party. For the Veasey Fair Texas Plan, in a typical election where Democratic statewide candidates receive 43.6% of the statewide vote, they can expect to receive a majority of the vote in 38.9% of the districts. If Democratic statewide candidates receive 50% of the vote, they can expect to receive a majority in 41.7% of the districts.

### Methodology

Scholars and practitioners widely use the method of using statewide election returns to evaluate the partisan consequences of proposed redistricting plans. This methodology has been followed by redistricting practitioners in court<sup>1</sup> and by scholars in respected journals.

# Step 1. Calculate statewide election returns within proposed districts.

The first step is to disaggregate statewide election results reported in precincts to the smaller 2010 census blocks, which are essentially the building blocks of districts. These election results are then re-aggregated into proposed districts.

Redistricting consultant Clark Bensen describes how a measure of generic partisan strength within districts is constructed in practice,

Of course, the first thing for the partisan to review is the overall party control. This is accomplished by a review of the previous elections aggregated for the planned districts. It will generate a range of likely events, based upon what elections are used to make the assessment. Some drafters use a variety of election averages for this purpose. For example, a) several collections of races that were close races statewide; b) some races that were near the top, or near the bottom, of the winning scale; c) a well-known race, such as a recent presidential or

Jonathan Katz in *O'Lear v. Miller* No. 222 F. Supp. 2d 850 (E.D. Mich. - 2002); Allan Lichtman in *Vieth v. Commonwealth of Pennsylvania*, 188 F. Supp. 2d 532 (M.D. Pa. 2002); and Michael McDonald in *In Re 2001 Redistricting Cases* (Case No. S-10504).

<sup>&</sup>lt;sup>1</sup> Examples of expert witnesses who have used principal components of the approach described here include Keith Gaddie in *LULAC v. Perry*, 126 S. Ct. 2594 (2006); Gary King in *Voinovich v. Quilter*, 507 U.S. 146 (1993);

gubernatorial race; one or more races that were so-called "base races" which are more likely to reflect generic partisan strength and not candidate factors.<sup>2</sup>

As Bensen describes, a virtue of statewide races to calculate a generic partisan strength measure is that they are not contaminated by differing candidates' campaigns in different districts.

Many others use statewide elections to measure the generic partisan strength of districts. For example, political scientists Bernard Grofman and Gary King describe a "reasonable measure" of generic partisan strength as "creat(ing) hypothetical votes in districts under the new redistricting plan by using the actual votes cast in a previous election for some statewide race (often a low visibility race, such as state treasurer or board of regents) and breaking them down into the new districts." Non-partisan election analysts such as the Cook Political Report also use this approach. They average Democratic two-party vote shares for the two most recent presidential elections to create their Partisan Voter Index within congressional districts, as "an objective measurement of each congressional district that allows comparisons between states and districts." Within a single state, all statewide elections would serve the same purpose as presidential elections that are used for cross-state comparisons.

Plaintiff's legal counsel provided me with spreadsheets of election results which I understand to be generated by the Texas Legislative Council. These spreadsheets report all even-numbered-year statewide general election results from 2002 to 2010 re-aggregated into districts for the redistricting plans analyzed in this report.

### Step 2. Compute average share of "two-party" vote across districts.

The second step is to calculate the "two-party" vote shares within districts and to average these values across districts.

With few exceptions, the Democratic or Republican candidates receive the most votes in a given election. Those who control redistricting manipulate district boundaries through partisan gerrymandering primarily to affect the representation of the two major American political parties. For these reasons, scholarly studies of redistricting, such as the seminal work by Edward Tufte and those that followed,<sup>5</sup> calculate baseline partisanship measures for the "two-party" vote, which I express as the Democratic share of the Democratic plus Republican vote. Elections where a major party candidate is not present are excluded from the analysis.

<sup>3</sup> Bernard Grofman and Gary King. 2007. "The Future of Partisan Symmetry as a Judicial Test for Partisan Gerrymandering after *LULAC v. Perry*." *Election Law Journal* 6(1): 11.

3

<sup>&</sup>lt;sup>2</sup> Clark Bensen. 2004. "Substantial Political Consequences, A Practitioner's Perspective on Redistricting." *Extensions: A Journal of the Karl Albert Congressional Research and Studies Center*. Fall, 2004. Available at: http://www.ou.edu/special/albertctr/extensions/fall2004/Bensen.html.

<sup>&</sup>lt;sup>4</sup> The Cook Political Report. 2009. "Introducing The Cook Political Report Partisan Voting Index (PVI) for the 111th Congress." http://cookpolitical.com/node/4201 (accessed February 22, 2011).

<sup>&</sup>lt;sup>5</sup> Edward R. Tufte. 1973. "The Relationship between Seats and Votes in Two-Party Systems." *The American Political Science Review* 67(2): 540-54.

Districts are drawn to represent people, not voters. Inevitably, this means that voter turnout within districts will be affected by such district-specific effects as competitiveness of districts, candidates' campaigns, voter eligibility, and socio-economic factors that disproportionately affect poor and minority individuals. Scholars and practitioners compute vote shares as the average two-party vote across districts to control for these disparate turnout rates.

Donald Stokes, appointed by the New Jersey Chief Justice to be the eleventh member of the New Jersey state legislative redistricting commission in 1981 and 1991, is one such scholar who recognized the need, and described in detail, how to adapt his analysis of partisan fairness for such turnout differences. He notes, "The relationship of votes to seats is, however, complicated by the fact that a higher fraction of the total population goes to the polls in the legislative districts won by the Republicans," and further states, "[t]his difference needs to be taken into account as we describe the relationship of popular support to legislative seats under a fair plan of representation." <sup>6</sup> To remove "the effects of differences in demography and participation between Democratic districts" Dr. Stokes assumes that "those who do vote represent the interests and preferences of those who don't." Therefore, the approach is to calculate the "average of the parties" vote share of the popular vote calculated district by district across the state, rather than the parties' share of the vote pooled across districts of the state."8

Others concur with this approach. Bernard Grofman and Gary King write, "Estimating partisan bias and electoral responsiveness both first require studying how the statewide average district vote for Democratic candidates (which in our simple two-party running example is 100% minus the fraction for the Republican candidates) will translate into the expected statewide fraction of seats for the Democratic Party." J. Morgan Kousser assesses the partisan fairness of congressional redistricting plans in California by using the vote for "a Democratic candidate for congress in an average district in California," not the aggregated vote for all districts. In estimating partisan bias in congressional plans across the nation, Janet Campagna and Bernard Grofman, reject the use of the aggregated "raw vote" and instead utilize the "mean vote share."9

Using the approach, in Table 1, I list the percentage Democratic two-party vote for all major-party contested statewide elections averaged across the adopted congressional districts. The average Democratic two-party vote for all major-party contested elections is 43.6%. The maximum vote share is 49.1% for the Supreme Court 7, 2008 contest and the minimum vote share is 35.9% for the Comptroller, 2002 contest.

In Table 2, I present the Democratic share of the two-party vote for all statewide elections within each of the districts adopted in the C185 congressional plan. In Table 3, I present the Democratic share of the two-party vote for all statewide elections within each of the districts for

<sup>8</sup> Stokes, p. 16.

<sup>&</sup>lt;sup>6</sup> Donald E. Stokes. 1993. "Legislative Redistricting by the New Jersey Plan." New Brunswick, New Jersey: Fund for New Jersey, p. 15.

Stokes, p. 16.

<sup>&</sup>lt;sup>3</sup> Bernard Grofman and Gary King, 2007, "The Future of Partisan Symmetry as a Judicial Test for Partisan Gerrymandering after LULAC v. Perry." Election Law Journal 6(1): 10; J. Morgan Kousser. 1996. "Estimating the Partisan Consequences of Redistricting Plans-Simply," Legislative Studies Quarterly 21(4): 530; Janet Campagna and Bernard Grofman 1990. "Party Control and Partisan Bias in 1980s Congressional Redistricting." The Journal of Politics 52(4): 1247.

the Veasey Fair Texas congressional plan. In Table 3, I present the Democratic share of the two-party vote for all statewide elections within each of the districts adopted in the S148 state Senate plan. In Table 4, I present the Democratic share of the two-party vote for all statewide elections within each of the districts adopted in the H283 state House plan.

## Step 3. Create a Seats to Votes Diagram

The third step is to estimate the likely outcomes that would occur for different vote shares. Bernard Grofman and Gary King describe the technique, as it is commonly applied:

...one assumes that, if the swing in votes for the Democratic Party statewide increased by (say) one percentage point, the same uniform swing would occur in every district within the state. We can use this "uniform partisan swing" assumption by adding one percentage point to each district in the state and then declaring the candidates "winners" in each district based on these new hypothetical vote results; this produces one additional point on the seats-votes plot. The same procedure is repeated by adding (and subtracting) a large range of values uniformly one at a time to all districts and recomputing the statewide seat totals. In this way, we can reconstruct an entire seats-votes curve based on this one assumption. <sup>10</sup>

In the Appendix at Exhibit B, I create these seats-to-votes diagrams for the adopted congressional plan, the Veasey Fair Texas Plan, the adopted Senate plan, and the adopted House plan. The input for these diagrams are the 48 individual major-party contested statewide elections from 2002-2010, and the average of all these elections. I plot the diagrams votes shares between 40 and 60 percent, since that range is informative about the partisan gerrymandering strategies.

A visual inspection of the diagrams reveals remarkable uniformity in shape among all elections. This includes the best performing Democratic election - the Supreme Court 7, 2008 contest - and the best performing Republican election - the Comptroller, 2002 contest. The same is true for the Governor, 2006 contest, which may have affected the distribution of party votes across districts if one of the two competitive minor party candidates took a disproportionate vote from one of the major party candidates. Observing this uniformity, it is my opinion that the seats-to-votes diagrams for the average of all statewide offices are representative of the diagrams for the individual election contests.

It is from these analyses that I draw my conclusion that the adopted redistricting plans are Republican gerrymanders, designed with a purpose to dictate electoral outcomes by strategically grouping voters within districts based on their political orientation and that the representational rights of Democratic voters and the Democratic Party are thereby disfavored on the basis of their political views.

<sup>&</sup>lt;sup>10</sup> Grofman and King, p.11.